REMARKS

Remarks

This is a response to the Office Action dated July 11, 2005. Claims 1, 3-6, and 8-19 are pending in the application. Claims 8 and 9 were rejected under 35 U.S.C. § 102(b) as being unpatentable over U.S. Pat. No. 5,513,551 ("Morishita"). Claims 1, 3-6, and 10-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Morishita in view of U.S. patent No. 6,433,991 ("Deaton"). These rejections are believed to be overcome in view of the amendments made to claims 1, 9 and 10.

The rejections from the Office Action dated July 11, 2005 are discussed below in connection with the various claims. No new matter has been added. Reconsideration of the application is respectfully requested in light of the following remarks.

Rejections Under 35 U.S.C. § 102(b)

Independent Claim 9

Independent claim 9 was rejected pursuant to 35 U.S.C. § 102(b) as being anticipated by Morishita. Independent claim 9, as amended, relates to a method for dissipating energy in a swing cushion system of a work machine. The system includes the steps of receiving a swing stop command, generating a signal indicative of variable pre-determined parameters, dissipating energy in the swing cushion system using the signal, and **repeatedly** oscillating a directional control member to dissipate energy in the swing cushion system in response to the signal.

According to the Examiner, Morishita teaches a method for dissipating energy in a swing cushion of a work machine, including the steps of "dissipating energy in said swing cushion system using said signal (figure 5)" and "oscillating said directional control member to dissipate energy in said swing cushion system in response to said signal." While the Applicant respectfully disagrees with the Examiner's construction of Morishita teaching an oscillation of the directional control member to dissipate energy in the swing cushion system, Applicant has amended claim 9 to clarify the term *oscillating*. The claim now requires the step of **repeatedly** oscillating a directional control member to dissipate energy in the swing cushion system. In contrast, Morishita discloses that "[w]hen the swing bracket

(11) is stopped at a position between the right and left limits...the electromagnetic proportional control valve (19) is operated back in an opening direction for *instant* as the swing bracket (11) stops." (See Col. 7, ll. 37-45, emphasis added). The Examiner states that the "open, close, open and close pattern is the equivalent of oscillating, and includes the dissipation of energy." While energy may be dissipated by opening and closing the directional control member a single extra time, the amount of energy to be dissipated is unknown. Depending on the swing speed and position of the swing system, more or less energy may need to be dissipated. Using only a single "oscillation" to relieve excess energy in the swing system may lead to the swing system drifting beyond the desired position if too much energy is dissipated, or a violent bounce if too little energy is dissipated. Because the amount of energy to be dissipated is unknown over various swing speeds and positions, an optimized signal indicative of variable pre-determined parameters is sent to repeatedly oscillate the directional control member to dissipate stored energy in the swing system.

Because Morishita does not teach or suggest repeatedly oscillating a directional control member to dissipate energy in the swing cushion system, Applicant respectfully submits that Morishita does not anticipate the present invention.

Accordingly, Applicant requests that the Examiner withdraw this rejection of independent claim 9.

Dependent Claim 8

Dependent claim 8 was also rejected pursuant to 35 U.S.C. § 102(b) as being anticipated by Morishita. The dependent claim should be allowed for the reasons set out above for claim 9, from which it depends. Applicant therefore requests that the Examiner withdraw this rejection of this claim.

Rejections under 35 U.S.C. § 103(a)

Independent Claims 1 and 10

Independent claims 1 and 10 were rejected under the obviousness provisions of 35 U.S.C. § 103(a) as allegedly being unpatentable over Morishita in view of Deaton. Independent claim 1, as amended, relates to a swing cushion of a work machine. The swing cushion includes a directional fluid control device having a directional fluid member, wherein

a control device outputs a signal to the directional fluid control device to **repeatedly** oscillate the directional control member to dissipate energy in the fluid. Independent claim 10, as amended, relates to a method for dissipating energy in a swing cushion system of a work machine. The system includes the steps of receiving a swing stop command, generating a **repeated oscillating** signal indicative of variable pre-determined parameters, and dissipating energy in the swing cushion system using the **repeated oscillating** signal.

Morishita is discussed in detail above. Deaton relates to controlling activation of devices such as downhole devices found in wellbores. (*See* Col. 1, ll. 4-6). Deaton does not teach or suggest teach or suggest repeatedly oscillating a directional control member to dissipate energy in the swing cushion system. Instead, the signal of Deaton is used to move an operator member of a downhole device in incremental steps. (*See* Col. 3, ll. 12-22). "The operating actuator is cycled between on and off states...to move an operator member of a downhole device in incremental steps" and the holding actuator is maintained in an active state to "latch or maintain the operator member in its current position after each move." (*See* Abstract, Col. 3, ll. 12-122). The signal in Deaton is neither used to "**repeatedly** oscillate said directional control member to dissipate energy in the fluid," as recited in claim 1, nor is it used to "[dissipate] energy in said swing cushion system using said repeated oscillating signal," as recited in claim 10. The signal in Deaton is used to control the movement of the ratchet sleeve along precise ratcheting steps. (*See* Col. 4, ll. 37-57). Because of this controlled movement by the actuators in Deaton, **there is no need to dissipate excess kinetic energy** at the end of a swing cycle. As a result, one of ordinary skill in the art would not look to combine the references of Morishita with Deaton.

For at least these reasons, claims 1 and 10 are not obvious in view of Morishita and Deaton, alone or in combination. Accordingly, Applicant requests that the Examiner withdraw this rejection of claims 1 and 10.

Dependent Claims 3-6 and 11

Dependent claims 3-6 and 11 were also rejected under the obviousness provisions of 35 U.S.C. § 103(a) as allegedly being unpatentable over Morishita in view of Deaton. These dependent claims should be allowed for the reasons set out above for claims 1 and 10, from which they depends. Applicant therefore requests that the Examiner withdraw

this rejection of these claims.

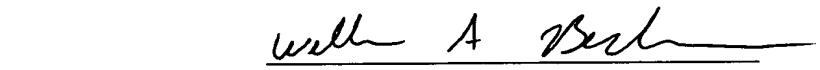
New Claims

With this response, new claims 12-19 have been added. Support for these claims may be found in the specification. No new matter has been added. New claims 12-19 should be allowed over the cited references for the same reasons as discussed above. Accordingly, Applicants request that the Examiner allow new claims 12-19.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections, and that they be withdrawn. The Examiner is courteously invited to telephone the undersigned representative if it is believed that an interview might be useful for any reason.

Respectfully submitted,



William A. Beckman
Registration No. 57,589
Caterpillar Inc.

Telephone: (309) 675-5187
Facsimile: (309) 675-1236